



P0D81

Battery Charger Input Range/Performance

P0D81 indicates that the battery charger input is outside the expected range or is not performing correctly, as detected by the control module that monitors the charging system. The computer compares the charger's input voltage or signal against a stored profile and sets this code when the reading is too high, too low, or erratic for the conditions.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Hybrid propulsion

Symptoms you may notice

- Illumination of the battery/charging system warning light or a service vehicle soon message
- The battery charger fails to charge the battery or charges very slowly
- The charger may shut down intermittently or refuse to start a charge cycle
- Accessory functions or vehicle starting may be affected if the battery is not being maintained
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Poor or corroded electrical connections at the charger input, including loose terminals or damaged pins
- 2 A failing battery charger unit or its internal power supply components
- 3 Wiring damage such as chafed insulation, open circuits, or short circuits in the charger input circuit
- 4 A weak or failing 12-volt battery that cannot accept a charge properly
- 5 Faulty voltage sensing or feedback circuitry within the charger or control module
- 6 Incorrect charger input voltage from the power source, such as a low or unstable supply

How to diagnose and fix it

- 1 Inspect and clean all charger input connections, checking for corrosion, tightness, and damaged pins
- 2 Measure the input voltage at the charger with a multimeter and compare it to the specified range
- 3 Check the charger's ground circuit for excessive resistance or loose mounting points
- 4 Test the 12-volt battery state of charge and perform a load test to rule out a weak battery
- 5 Inspect the wiring harness between the charger and the control module for opens, shorts, or chafing
- 6 If the charger is a separate module, substitute a known-good unit and clear the code to see if it returns
- 7 Follow the manufacturer's diagnostic flow chart for the specific vehicle to test the control module and charger communication



Charger Input Faults You Might Overlook

- A loose or corroded ground connection at the charger can cause this code even when the positive input voltage looks perfect, so always check both sides of the circuit.
- Intermittent codes often appear when the charger is exposed to vibration or temperature extremes, so wiggle-test the harness while monitoring live data.
- Some vehicles set P0D81 when the battery is deeply discharged and the charger cannot bring it up to the expected voltage within a set time, which is not a charger failure.
- The code can be triggered by a weak 12-volt battery that is nearing the end of its life, so load-test the battery before condemning the charger.
- After repairs, the code may require several drive cycles or a charger input relearn procedure to clear, so do not assume the fix failed if the light stays on briefly.

Can I keep driving with P0D81?

If the battery/charging warning light is on, avoid long trips and heavy electrical loads because the battery may not be charging correctly. It is safe to drive a short distance to a repair shop, but do not rely on the vehicle for extended use until the fault is diagnosed.

Tools that help

- Digital multimeter
- Battery load tester
- OBD-II scan tool with live data capability
- Wiring diagram for the specific vehicle
- Terminal cleaning brush and dielectric grease

Reading P0D81

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
81	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0D80** Battery Charger Input Circuit/Open · **P0D82** Battery Charger Input Circuit Low



See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d81/>

